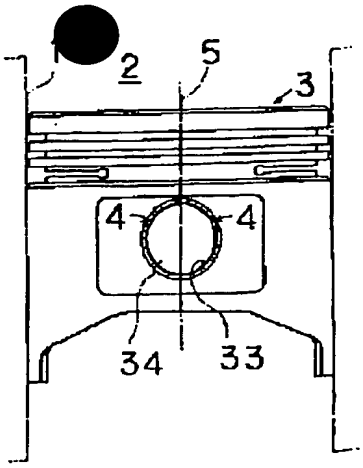
EUROPEAN PATENT OFFICE

Patent Abstracts of Jap[redacted]



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APPLICANT : DAIHATSU MOTOR CO LTD;

INVENTOR : UEDA MASATAKA;

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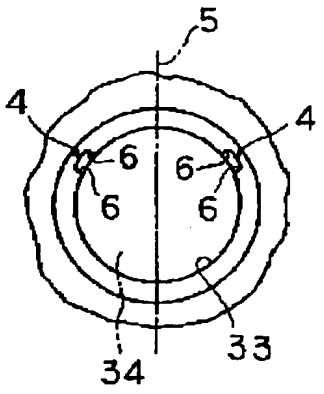
TITLE : PISTON OF INTERNAL COMBUSTION ENGINE



ABSTRACT : PROBLEM TO BE SOLVED: To ensure the pressure receiving area sufficiently on the inner circumferential surface of a pin hole, and improve lubricating performance by forming an oiling passage formed on a piston pin hole arranged on the inner side of a piston in a groove having vertical wall parts faced to each other in nearly parallel, and opening the vertical wall parts of the groove on the inner circumferential surface of the piston pin hole.

SOLUTION: A piston 3 which is slidably fit to the cylinder hole 2 of a cylinder block 1 is provided with a piston pin hole 33, and an oiling groove 4 is formed along the axial direction of the pin hole 33 on the inner circumferential surface thereof. The oiling groove 4 is formed in a longitudinal hole having vertical wall parts whose cross sectional surfaces are faced to each other in nearly parallel, on a symmetrical position to a piston center shaft 5, and the vertical wall, parts 6 are opened to the inner circumferential surface of a pin hole 33. Even if the oiling groove 4 is formed by casting whose work accuracy is lower than that of precision instrument work, sharply changing of a groove width is eliminated if a molding is slid to the inner side or the outer side of the pin hole 33, and the heavy pressure area of the inner circumferential surface of the pin hole 33 is ensured sufficiently.

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【図面の簡単な説明】

【図１】本発明に係る実施例のピストンの側面図である。

【図２】（ａ）同要部の拡大図である。

（ｂ）同給油溝の横断面の拡大図である。

【図３】従来技術の実施例のピストンの側面図である。

【図４】図３のＡ－Ａ線に沿う縦断面図である。

【図５】図３の要部の拡大図である。

＊【図６】従来技術の実施例における給油溝幅のばらつきの発生状況の説明図である。

【符号の説明】

３　ピストン

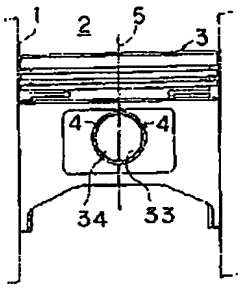
４　給油路（給油溝）

６　縦壁部

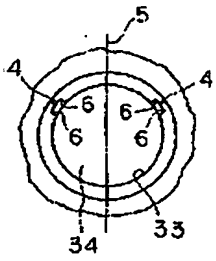
３２　ボス部

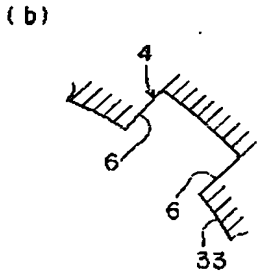
３３　ピストンピン孔

【図１】

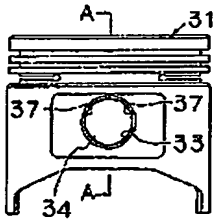


【図２】

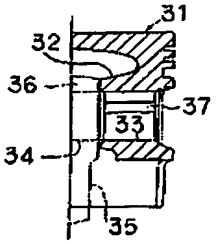




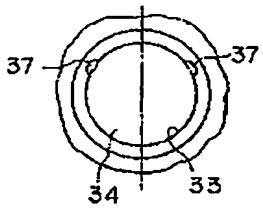
【図３】



【図４】



【図５】



【図６】